



Work Order ID 117864

July-10-14 10:39:34 AM

\*117864\*

Page 2

Item ID: 647.0113

Accept

\*N900040100\*

Setup Start

\*NS1\*

Revision ID:

Stop

\*NS2\*

Item Name: Strut Doubler

Start Date: 5/05/14

Start Qty: 16.00

\*16\*

Cust Item ID:

Required Date: 5/05/14

Req'd Qty: 16.00

\*16\*

Customer:

Reference:

Approvals:

Process Plan: \_\_\_\_\_

Date: \_\_\_\_\_

Tooling: \_\_\_\_\_

Date: \_\_\_\_\_

Run

Start

\*NR1\*

QC: \_\_\_\_\_

Date: \_\_\_\_\_

SPC (Y/N): \_\_\_\_\_

Date: \_\_\_\_\_

Stop

\*NR2\*

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

130

QC8- Inspect parts - second check

0.00

DAS

27

9-19

0.00

M/H/17

20

\*130\*

QC

Memo

Quality Control

140

Outsource process-Anodize per QSI017 4.1.10.1

0.00

\*140\*

Outsource4

Memo

0.00

Outsource process - Anodize

Issue P/O to ATG : 25116

1- Black Anodize as per Dwg 647.0100

2- PRIME AS PER DWG, SEE NOTE #2

Certification of Comformity is required

CY 14/07/23 20

150

Receive &amp; Inspect for Damage &amp; Mat'l Certs

0.00

\*150\*

Packaging

Memo

0.00

Packaging

20x 8014-8-19

# Work Order ID 117864

**\*117864\***

Page 3

July-10-14 10:39:34 AM

Item ID: 647.0113 Accept **\*N900040100\*** Setup Start **\*NS1\***  
Revision ID: Stop **\*NS2\***  
Item Name: Strut Doubler  
Start Date: 5/05/14 Start Qty: 16.00 **\*16\*** Cust Item ID:  
Required Date: 5/05/14 Req'd Qty: 16.00 **\*16\*** Customer:  
Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start **\*NR1\***  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	<del>QC5</del> Inspect part completeness to step on W/O	0.00				(20)		DAS 38 9-89	14/08/14
<b>*160*</b>	QC								
Quality Control	Memo	0.00							
190	Identify as per dwg & Stock Location: CC/KO 80	0.00				20x		DAS 28 9-89	AUG 20 2014
<b>*190*</b>	Packaging								
Packaging	Memo	0.00							
	***IDENTIFY AS PER APICAL MPP-120 BY STAMPING P# AND REV***								
200	QC21- Final Inspection - Work Order Release	0.00				MLJ	14-08-21		
<b>*200*</b>	QC								
Quality Control	Memo	0.00							

MLJ 14-08-21

# Picklist Print

July-10-14 10:39:37 AM

Page 1

Work Order ID: 117864

**\*117864\***

Parent Item: 647.0113

**\*647 0113\***

Parent Item Name: Strut Doubler

Start Date: 5/05/14

Required Date: 5/05/14

Start Qty: 16.00

Required Qty: 16.00

Comments: IPP REV:A 12.08.14 NEW ISSUE DD VERF:JFS

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M2024T3S.125		Purchased		No		110	sf	73.3000	0.318	6			

**\*M2024T3S 125\***

2024-T3 .125 sheet

**\*\***

mm 17/07/17

Location

Loc Qty

Loc Code

MAT022

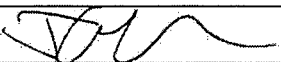
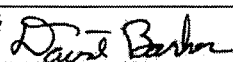
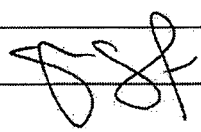
73.3

M127668

73.3

7.3



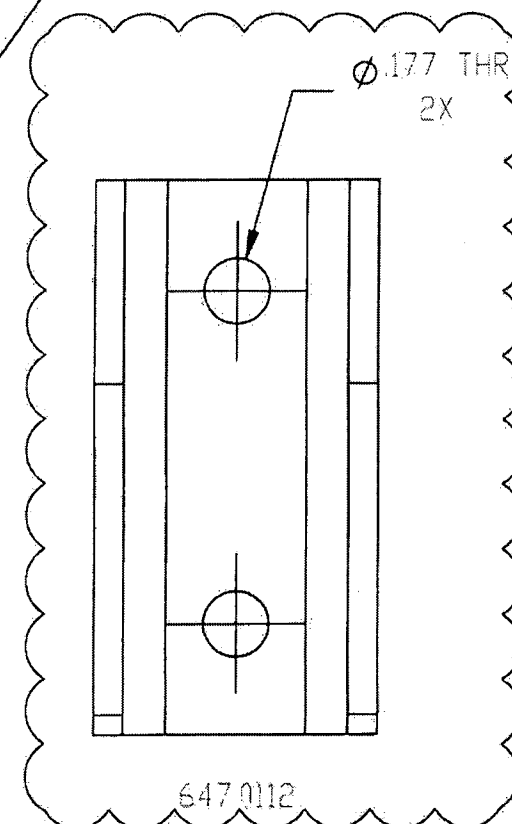
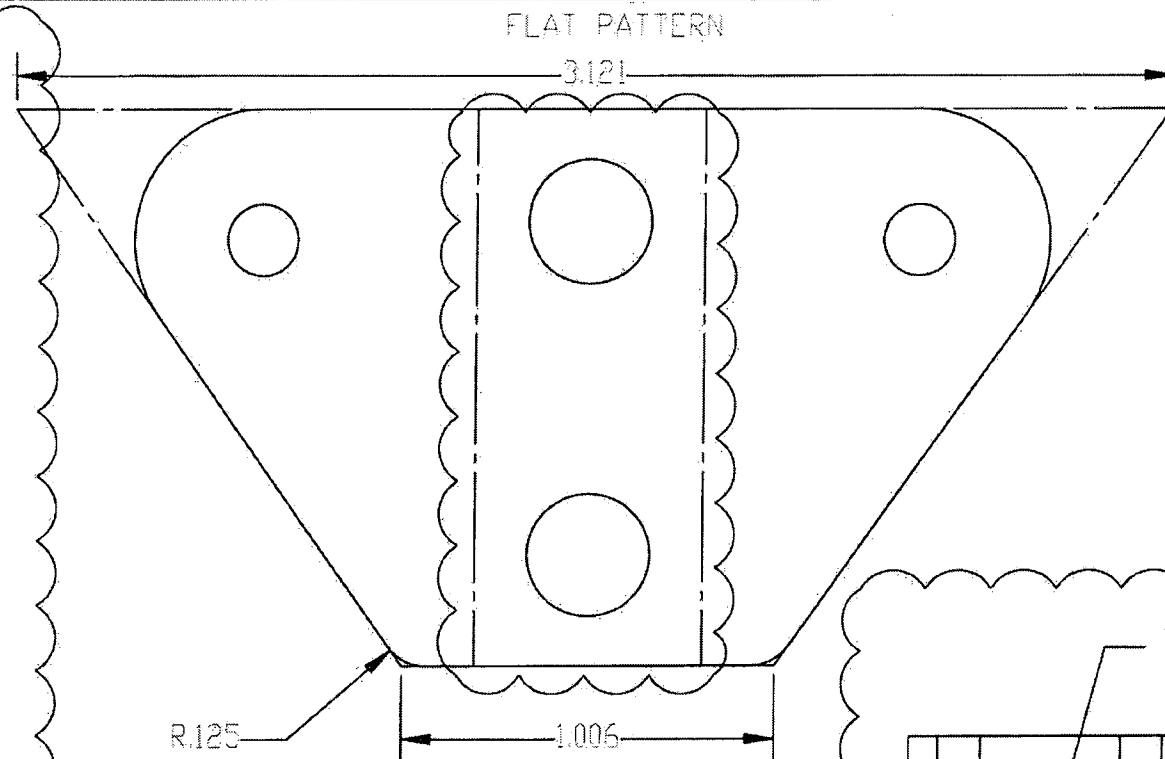
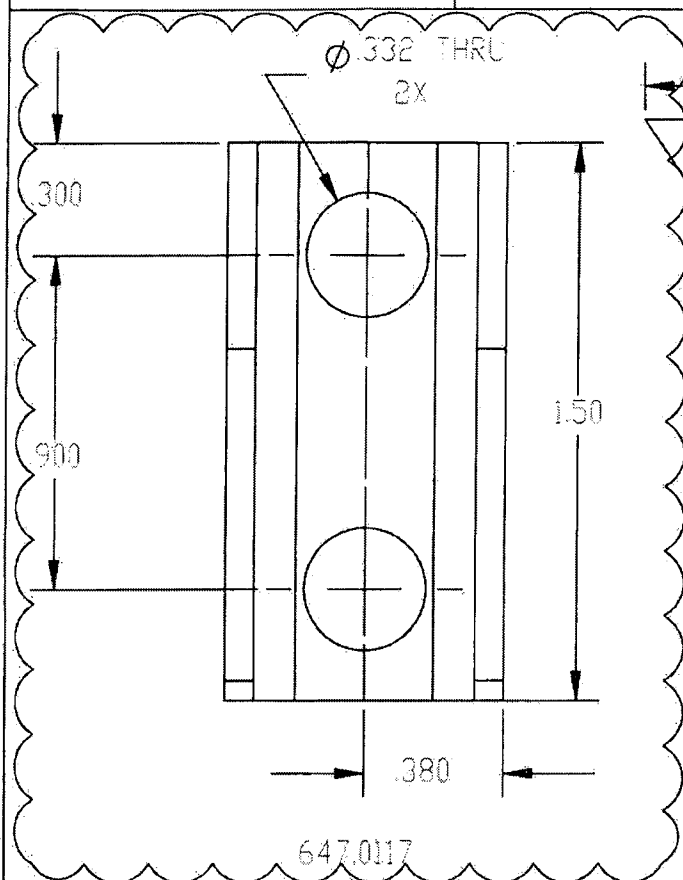
<b>APICAL</b>  INDUSTRIES, INC.	ENGINEERING CHANGE NOTICE NO. 03985			SHEET 1 OF 2	
	DWG NO. 647.0100	REV: A	PREPARED BY J. BECKER	DATE: 7/15/13	EFFECT ON DWG <input type="checkbox"/> INC. <input checked="" type="checkbox"/> UNINC.
	DWG TITLE: SHEET METAL				
	APPROVED BY: ENGR. 	MFG. 	QC 	EFF. NEXT ORDER	
TRANSACTION CODES (TC): A-ADD C-CREATE R-REVISE D-DELETE	REASON: REVISED NOTE 2. ADDED 647.0117				

- NOTES:
- IS** →
- 1 MATERIAL: ALUMINUM 2024-T3 PER AMS-QQ-A-250/4.
  - 2 FINISH: IAW MPP-172 ANODIZE IAW SECTION 2.1, PRETREATMENT IAW SECTION 3.1 AND PRIMER IAW SECTION 4.1.
  - 3. DEBURR AND BREAK ALL SHARP EDGES.
  - 4. IDENTIFY IAW MPP-120.
  - 5 MATERIAL: 304 SS IAW AMS 5643.
  - 6 FINISH: PRIME IAW MIL-P-23377J TYPE I CLASS N.
  - 7 OTHER DIMENSIONS SAME AS 647.0112.

1 117864 MJS  
14-05-06

**SHEET 1, ZONE D1 IS:**

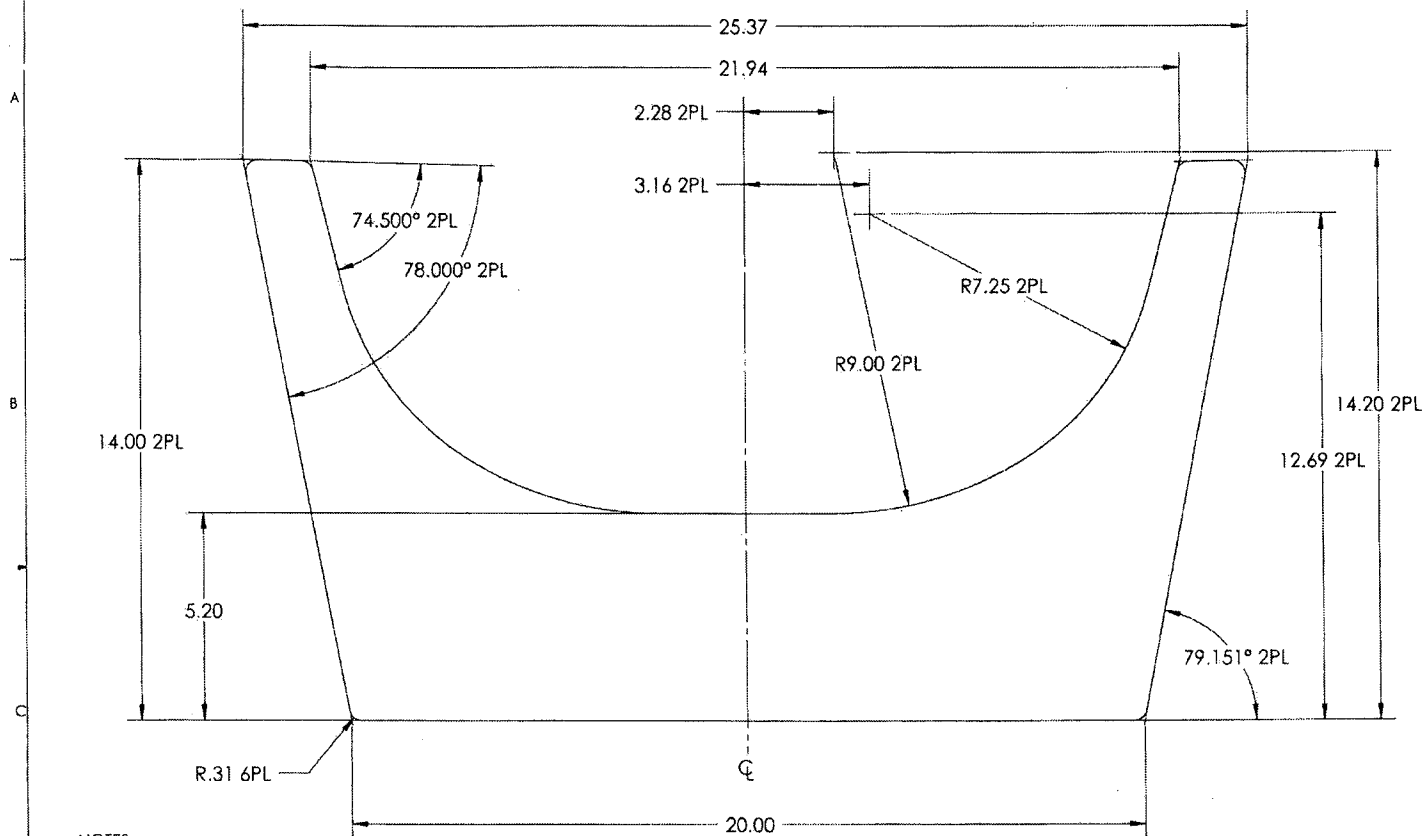
C	647.0117	STRUT BRACKET		△	△
F/NTC	PART NUMBER	DESCRIPTION		MATERIAL	SPECIFICATION
DOCUMENTS EFFECTED:				CHANGE CATEGORY	
<input type="checkbox"/> MDL <input type="checkbox"/> INSTALL INSTRUCTIONS <input type="checkbox"/> ICA <input type="checkbox"/> FMS <input type="checkbox"/> BOM				<input type="checkbox"/> MAJOR <input checked="" type="checkbox"/> MINOR	
				DER REVIEW REQUIRED	
				<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	



**SHEET 3, ZONE B2-4 IS:**

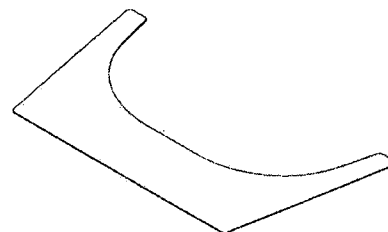
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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1	LAST PROTOTYPE REVISION RPT		N/C
2	INITIAL RELEASE	03/28/09	P. BRAVO
3	INCORPORATED ECH 02722, 00964, 00397	04/28/11	P. BRAVO



NOTES:

1. MATERIAL: ALUMINUM 2024-T3 PER AMS-QQ-A-250/4.
2. FINISH: HARD ANODIZE IAW MIL-A-8625 TYPE III, CLASS 2, COLOR BLACK; PRETREAT PR-148 ADHESION PROMOTER; PRIME IAW MIL-P-23377J TYPE I CLASS N.
3. DEBURR AND BREAK ALL SHARP EDGES.
4. IDENTIFY IAW MPP-120.
5. MATERIAL: 304 SS IAW AMS 5643.
6. FINISH: PRIME IAW MIL-P-23377J TYPE I CLASS N.



647.0110

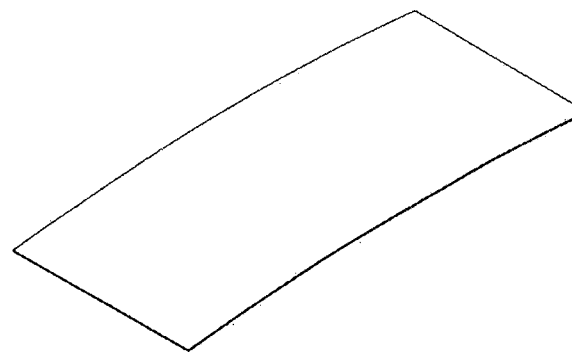
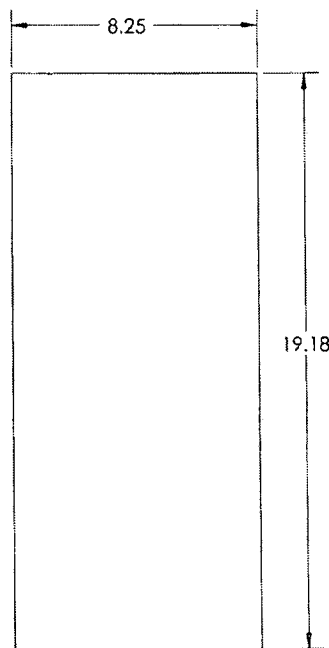
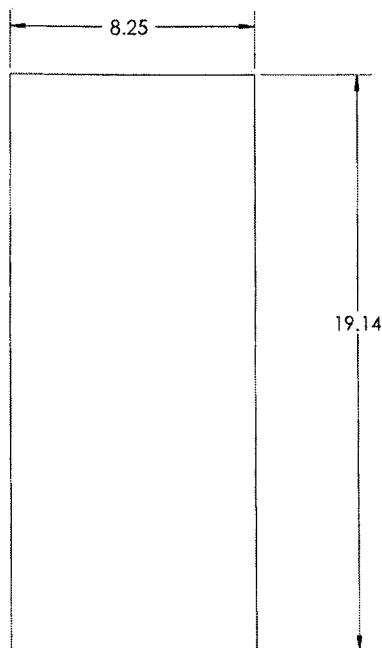
UNINCORPORATED ECN(S)

03985

		647.0116	DOUBLER	△	△
		647.0115	CLIP	△	△
		647.0114	CLIP	△	△
		647.0113	STRUT DOUBLER	△	△
		647.0112	STRUT BRACKET	△	△
		647.0111	PANEL	△	△
		647.0110	ROOF DOUBLER	△	△
	FIND #	PART #	DESCRIPTION	MAT'L	SPEC.
QTY			PARTS LIST		
NEXT ASSY (S)			APICAL INDUSTRIES		
646.9500			2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA 92056-3512 (760)724-5300		
ORIGINAL DATE: 03-28-09			SHEETMETAL		
DRAWN BY: J. KOSAND			DATE: 03-28-09		
DRAWING APPROVAL: P. BRAVO			DWG. NO. 647.0100		
CONTRACT NO:			SCALE: NONE		
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES ARE: 3 PLACE DECIMALS ± .01 2 PLACE DECIMALS ± .005 ANGLES ± .5°			REV. A		
			SHEET 1 OF 6		

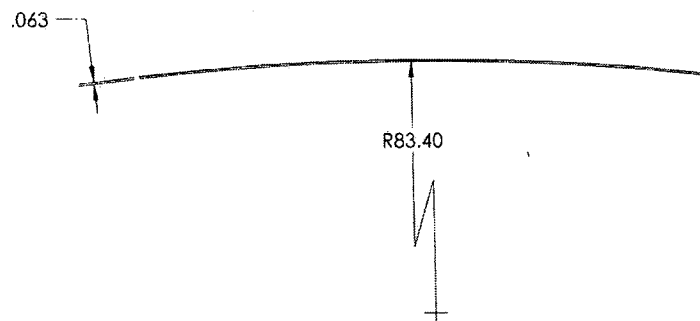
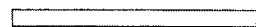


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647.0111

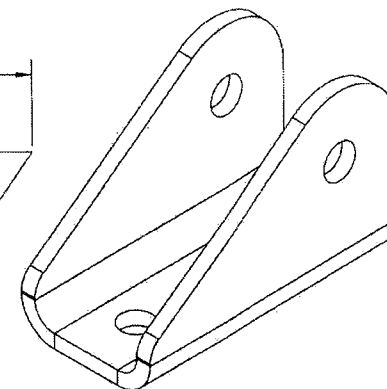
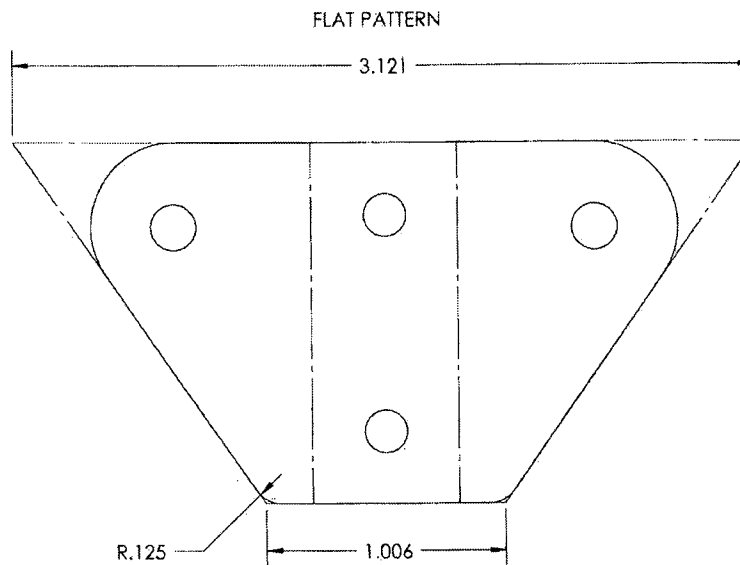
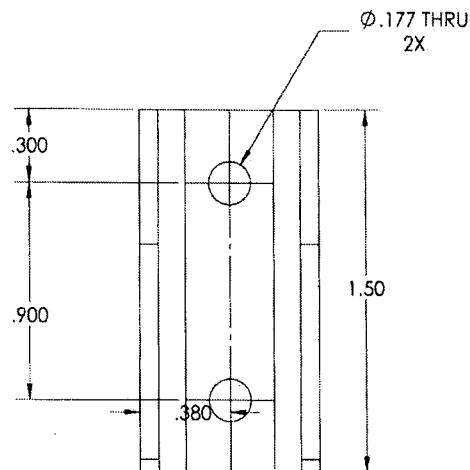
FLAT PATTERN



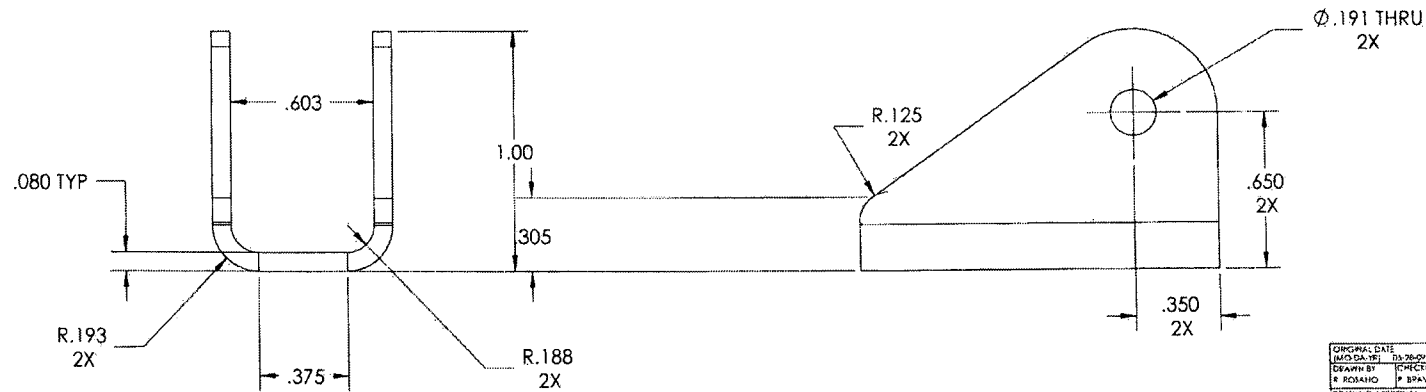
<b>APICAL INDUSTRIES</b> 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760) 724-5300		<b>SHEETMETAL</b>	
ORIGINAL DATE: 05-28-99 DRAWN BY: CHICOT R. ROMANO P. BRAVO DRAWING APPROVAL: P. BRAVO CONTRACT NO.	SIZE: 8 CAGE CODE: 07A26 DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ± .01 3 PLACE DECIMALS ± .005 ANGLES ± .5°	DWG. NO.: 647.0100 SCALE: NONE	REV. A SHEET 2 OF 6

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED



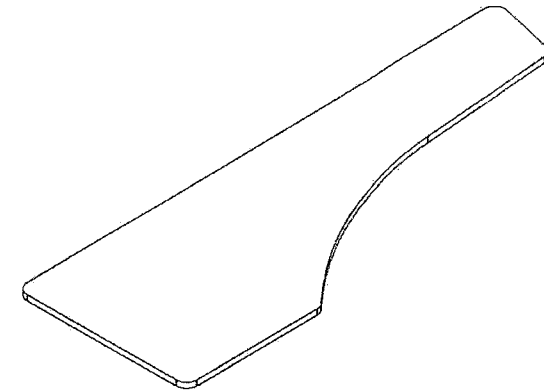
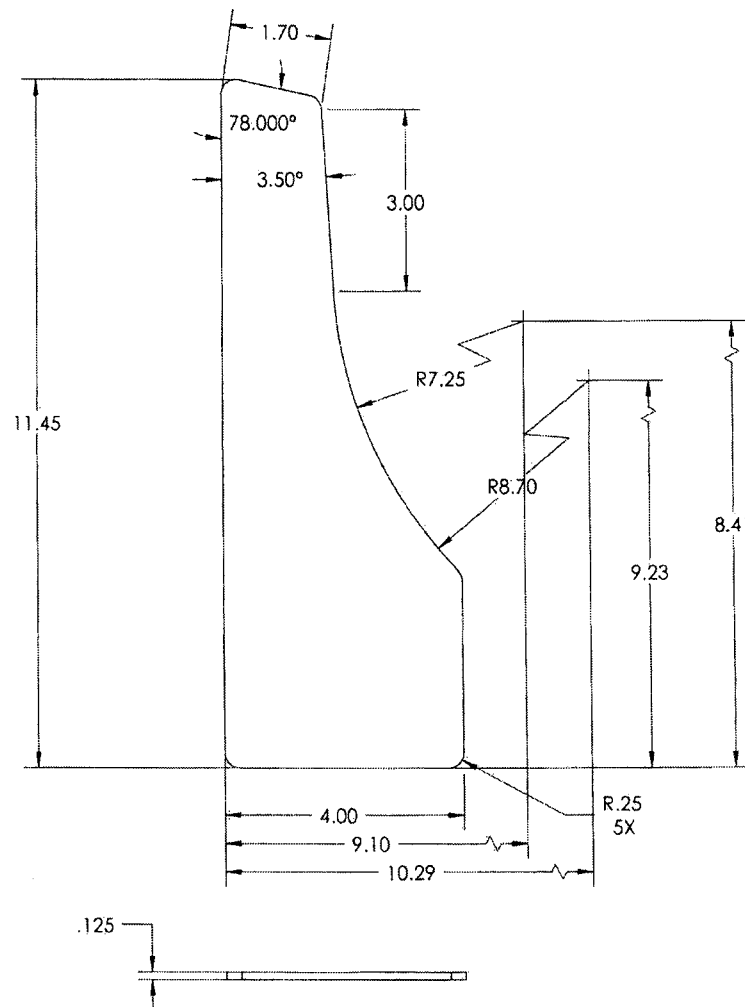
647.0112



ORIGINAL DATE (MO/DA/YR) 03/26/09		APICAL INDUSTRIES	
DRAWN BY: JCHICHTER		2608 TEMPLE HEIGHTS DR.	
R. ROSARIO P. BRAYO		OCEANSIDE, CA. 92056-3512 (760) 724-5300	
DRAWING APPROVAL P. BRAYO		SHEETMETAL	
DATE: 03/26/09			
CONTRACT NO.			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.5°		SHEET CODE: B	REV. A
DWG. NO. 647.0100		SCALE: NONE	SHEET 3 OF 6

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED

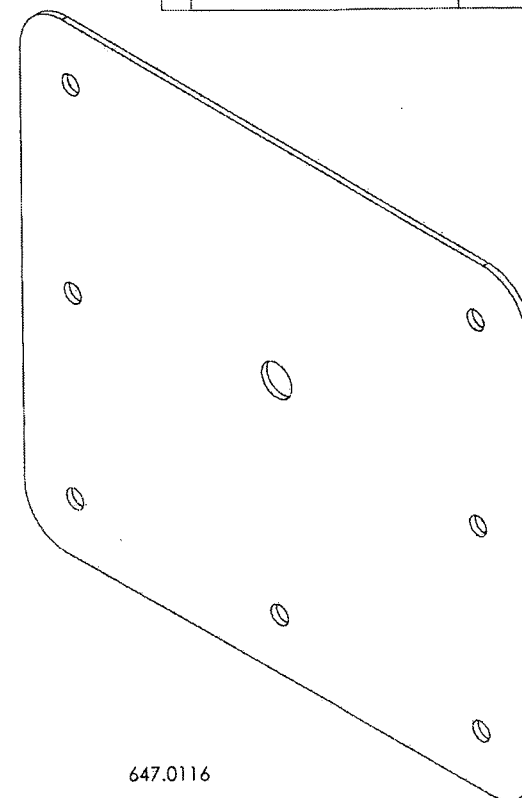
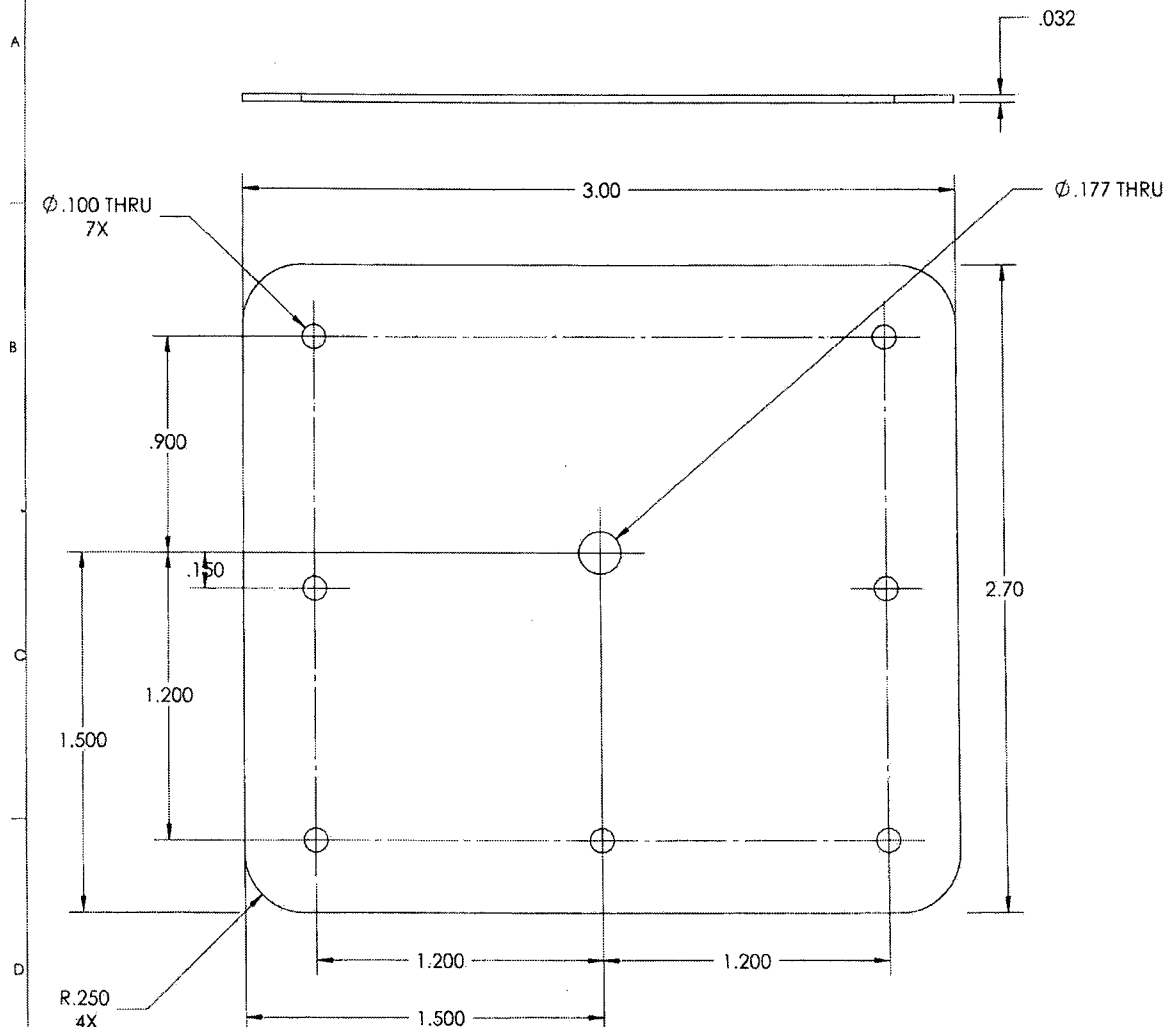


647.0113

ORIGINAL DATE: 05/28/07		APICAL INDUSTRIES	
DRAWN BY: J. CRISPER			
DESIGNED BY: P. ACISANO		2608 TEMPLE HEIGHTS DR.	
DRAWING APPROVAL: P. BRAVO		OCEANSIDE, CA. 92056-3512 (760)724-5300	
CONTRACT NO:		SHEETMETAL	
UNLESS OTHERWISE SPECIFIED		REV: B	REV: A
DIMENSIONS ARE IN INCHES		CAGE CODE: 07M16	DWG. NO: 647.010J
TOLERANCES ARE:		SCALE: NONE	SHEET 4 OF 6
2 PLACE DECIMALS ±.01			
3 PLACE DECIMALS ±.005			
ANGLES ±.5°			

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REVISIONS			
REV	DESCRIPTION	DATE	APPROVED



ORIGINAL DATE [MOD-DA-YR] 05-28-09		APICAL INDUSTRIES	
DRAWN BY: [CHECKER]		2608 TEMPLE HEIGHTS DR.	
P. [NOVANO]		OCEANSIDE, CA. 92056-3512 (760) 724-5300	
DRAWING APPROVAL P. [SPAVO]		SHEETMETAL	
RE-2609		SCALE NONE	
CONTRACT NO.		SHEET 6 OF 6	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ± .01 1 PLACE DECIMALS ± .005 ANGLES ± .5°		SIZE [PAGE CODE] DWG. NO. 647.0100	
		REV. A	



Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

## PURCHASE ORDER

Purchase Order ID **PO25116**

Purchase Order Date 7/23/2014

PO Print Date 7/23/2014

Page Number 2 of 5

**Order From :**

VC-ATG001

**Ship To :** DART AEROSPACE LTD

A.T.G. INDUSTRIES INC.  
731 INDUSTRIELLE ROAD  
ROCKLAND, ON K4K 1T2  
CANADA

1270 ABERDEEN  
HAWKESBURY, ON K6A 1K7  
CANADA

**Contact Name**

**Vendor Phone** 613-446-4544

**Buyer**

Chantal Lavoie

**Customer POID**

**Customer Tax #**

10127-2607

**Ship To Contact**

**Ship To Phone**

**Ship Via:**

VENDOR'S TRUCK

**Ship Acct:**

**Terms**

Net 30

**Currency**

CAD

**FOB**

FCA - (Free Carrier)

**Line Total: \$0.00**

4	120146	646.3812 GUSSET BRACKET	8/12/2014	10.00	\$0.00	\$0.00
---	--------	----------------------------	-----------	-------	--------	--------

Yes

8/12/2014

FINISH: HARD BLACK ANODIZE AS PER IAW MIL-A-8625 TYPE III, CLASS 2 / PRIME AS PER IAW MIL-P-23377J TYPE 1 CLASS N

**Line Total: \$0.00**

5	121503	646.3813 STRUT BRACKET	8/12/2014	10.00	\$0.00	\$0.00
---	--------	---------------------------	-----------	-------	--------	--------

Yes

8/12/2014

FINISH: HARD BLACK ANODIZE AS PER IAW MIL-A-8625 TYPE III, CLASS 2 / PRIME AS PER IAW MIL-P-23377J TYPE 1 CLASS N

**Line Total: \$0.00**

6	117864	647.0113 STRUT DOUBLER	8/12/2014	20.00	\$0.00	\$0.00
---	--------	---------------------------	-----------	-------	--------	--------

Yes

8/12/2014

FINISH: HARD BLACK ANODIZE AS PER IAW MIL-A-8625 TYPE III, CLASS 2 / PRIME AS PER IAW MIL-P-23377J TYPE 1 CLASS N

**Note:**

7/23/2014

8/14-8-19.



A.T.G. Industries Inc.  
731, rue Industrielle Rd.  
PLATING DEPARTMENT  
Rockland, On K4K 1T2  
Canada  
Ph: (613) 446-4544  
Fax: (613) 446-4556

### Pack List

Number: 63208

Date: 15-Aug-14

To

DART AEROSPACE LTD  
1270 ABERDEEN ST.  
HAWKESBURY, ON K6A 1K7  
Canada

Ship To

DART AEROSPACE LTD  
1270 ABERDEEN ST.  
HAWKESBURY, ON K6A 1K7  
Canada

Ph: 613-632-5200

Fax: 613-632-1185

Ph: 613-632-5200

Fax: 613-632-1185

Terms		Ship Via	
Quantity	Description	Rev:	
10 ea	Part: 646.3010 LH HAFT HARD ANODIZE AS PER MIL-A-8625 TY II, CLASS 2  PRIME AS PER MIL-P-23377J TYPE I CLASS N PRIMER IS SUPPLY BY THE CUSTOMER Job: 20140500 PO: PO25116		Line:
2 ea	Part: 646.3210 SUPPORT HARD ANODIZE AS PER MIL-A-8625 TY II, CLASS 2  PRIME AS PER MIL-P-23377J TYPE I CLASS N PRIMER IS SUPPLY BY THE CUSTOMER Job: 20140501 PO: PO25116		Line:
10 ea	Part: 646.3812 HARD ANODIZE AS PER MIL-A-8625 TY II, CLASS 2  PRIME AS PER MIL-P-23377J TYPE I CLASS N PRIMER IS SUPPLY BY THE CUSTOMER Job: 20140502 PO: PO25116		Line:
10 ea	Part: 646.3813 BRACKET HARD ANODIZE AS PER MIL-A-8625 TY II, CLASS 2  PRIME AS PER MIL-P-23377J TYPE I CLASS N PRIMER IS SUPPLY BY THE CUSTOMER Job: 20140503 PO: PO25116		Line:
20 ea	Part: 647.0113 STRUT DOUBLER HARD ANODIZE AS PER MIL-A-8625 TY II, CLASS 2  PRIME AS PER MIL-P-23377J TYPE I CLASS N		Line:

8/14-8/19